

**Instrumentation for Multiparameter Water Quality Monitoring—
Spot Checking, Profiling and Long-Term Deployments.**

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For over 40 years, Hydrolab Corporation has manufactured multiparameter water quality monitoring instrumentation for reliable field measurements. We are and continue to be the world leader in multiparameter equipment. We had many industry firsts over the years, and parameter availability is expanding with each generation of instruments. Parameters now available include temperature, conductivity, resistivity, TDS, salinity, dissolved oxygen, pH, ORP, nitrate, chloride, ammonium, chlorophyll, transmissivity, ambient light, depth, total dissolved gas and turbidity, available with our new shuttered probe design.

In response to market demand for non-fouling turbidity measurements, Hydrolab has developed an advanced, dependable, accurate, state-of-the-art turbidity sensor for exacting water quality studies. With our new patent pending shutter design the market now has a sensor capable of providing reliable measurements in areas where fouling had precluded measurement in the past.

Hydrolab's shutter technology eliminates the problems associated with wiper designs. Wiped sensors attempt to clean a sensor that has experienced some degree of fouling between measurements, similar to a wiper on a dirty windshield. Hydrolab's sensor covers the optics between samples and opens only during measurements, which eliminates fouling on optical surfaces and therefore extends deployment times. Our sensor now employs a synchronous modulation of an infrared LED, eliminating the concern of ambient light interference. Hydrolab's sensor is equipped with quartz lenses as opposed to plastic materials employed by other instrumentation. Quartz is significantly harder, virtually eliminating the possibility of scratching the optical surfaces. Discussion about other parameters will be covered including steady-state dissolved oxygen measurements, benefits of sample circulation and field proven technology for chlorophyll, total dissolved gas and ambient light.